IN THE CLAIMS

Claim 1. (Withdrawn) A method for an early diagnosis of cancer in a subject comprising the steps:

i) providing a fecal sample from said subject;

ii) treating said sample to obtain a feces-derived microorganism sample;

iii) identifying in the micoorganism sample one or more types of micoorganisms contained therein; and

iv) determining for each of said microorganisms its relative fraction from the total count of microorganisms in said sample, the relative fractions being indicative of the presence or absence of cancer in said subject.

Claim 2. (Withdrawn/Currently Amended) The method of claim 1, wherein said ~~subjct~~ subject is a human subject.

Claim 3. (Withdrawn/Currently Amended) The method of claim 1, wherein said microorganims are isolated by colonies formation on ~~seclective~~ selective culture mediums.

Claim 4. (Withdrawn) The method of claim 1, wherein said relative fraction of each of said micoorganisms is determined by calculating the percentage of said microorganism from the total count of microorganisms in the same or corresponding sample.

Claim 5. (Withdrawn) The method of claim 1, wherein said microorganism are bacteria.

Claim 6. (Withdrawn) The method of claim 5, wherein said bacteria are Gram-negative anaerobic bacteria.

Claim 7. (Withdrawn/Currently Amended) The method of claim 6, wherein said Gram-negative anaerobic bacteria is of a genus selected from the group consisting of Escherichia, Salmonella, Shigella, Klebsiella, Yersinisa, Enterobacter, Hemophilus, Gandnerella and Pasteurella.

Claim 8. (Withdrawn) The method of claim 7, wherein said bacteria is *E. coli*.

Claim 9. (Withdrawn) The method of claim 8, wherein *E. coli* coliform is isolated from said fecal sample by culturing the feces derived sample of bacteria on a culture medium selective for *E.coli*.

Claim 10. (Withdrawn/Currently Amended) The method ~~nf~~ of claim 9, wherein the culture medium is ~~select~~ selected from the group consisting of McConkey agar and m-Endo agar.

Claim 11. (Withdrawn) The method of claim 5, wherein said bacteria are Gram-positive bacteria.

Claim 12. (Withdrawn/Currently Amended) The method of claim 11, wherein said Gram-positive bacteria is of a genus selected from the group consisting of Staphylococcus, Enterococcus, Streptococcus, and Lactococcus.

Claim 13. (Withdrawn) The method of claim 12, wherein said bacteria is *Streptococcus bovis* and/or Enterocococcus sp.

Claim 14. (Withdrawn) The method of claim 13, wherein Enterococci coliform is isolated from said fecal sample by culturing the feces-derived sample of bacteria on a culture medium selective for Enterococcus.

Claim 15. (Withdrawn) The method of claim 14, wherein said culture medium is selected from the group consisting of Slanetz-Bartley agar and Bile-esculined-azide agar.

Claims 16-35 (Cancelled)

Claim 36. (Withdrawn) A method for an early diagnosis of cancer comprising the steps:

i) providing a fecal sample from said subject;

ii) treating said sample to obtain a feces-derived micoorganism sample;

iii) identifying in the micoorganism sample at least one type of micoorganism capable of expressing in a healthy subject L-asparaginase II (L-PAR II); and

iv) determining level of expression of L-PAR II or level of activity of L-PAR II, said level is indicative of the presence or absence of cancer cells in said subject.

Claim 37. (Withdrawn) The method of claim 36, wherein said fecal sample is a human fecal sample.

derived bacteria sample.

Claim 39. (Withdrawn) The method of claim 36, wherein aid micoorganisms are isolated from the feces-drived bacteria sample by colonies formation on selective culture plates.

Claim 40. (Withdrawn) The method of claim 36, wherein said micoorganisms capable of expressing L-Par II is *E. coil.*

Claim 41. (Withdrawn) The method of claim 36, wherein low levels of expression of L-PAR II or of activity of L-PAR II, indicate the presence of cancer cells in said subject.

Claim 42. (New) A method for diagnosis of cancer in a subject comprising the steps:

i) providing a fecal sample from said subject;

ii) treating said fecal sample to obtain a feces-derived bacteria sample therefrom;

iii) identifying in the bacteria sample one or more types of bacteria; and

iv) determining for each of said types of bacteria its relative fraction from the total count of bacteria in said sample or in a corresponding sample;

v) isolating bacteria of said one or more types from said sample;

vi) preparing a diagnostic sample containing bacteria of the types isolated, the fraction of each of the bacteria types in said diagnostic sample corresponds to the relative fraction thereof in the fecal sample, as determined in step (iv);

vii) interacting said diagnostic sample with cancer cells for a time period sufficient to detect lysis of said cancer cells by said diagnostic sample, thereby determining for said fecal sample a tumor cell necrosis index (TCNI); and

viii) diagnosing said subject as having or not having cancer in accordance with the TCNI value determined in (vii).

Claim 43. (New) A method for diagnosis of cancer in a subject comprising the steps:

i) providing a fecal sample from said subject;

ii) treating said fecal sample to obtain a feces-derived bacteria sample therefrom;

iii) identifying in the bacteria sample more than one type of bacteria; and

iv) determining for each of said more than one type of bacteria its relative fraction from the total count of bacteria in said sample or in a corresponding sample;

v) isolating bacteria of said more than one type from said sample;

vi) preparing a diagnostic sample containing bacteria of the types isolated, the fraction of each of the bacteria types in said diagnostic sample corresponds to the relative fraction thereof in the fecal sample, as determined in step (iv);

vii) interacting said diagnostic sample with cancer cells for a time period sufficient to detect lysis of said cancer cells by said diagnostic sample, thereby determining for said fecal sample a tumor cell necrosis index (TCNI); and

viii) diagnosing said subject as having or not having cancer in accordance with the TCNI value determined in (vii).

Claim 44. (New) A method according to claim 42, wherein said bacteria are feces-derived bacteria.

Claim 45. (New) A method according to claim 44, wherein said feces derived bacteria are selected from *E. Coli, Streptococcus Bovis,* and *Enterococcus* sp.

Claim 46. (New) The method of Claim 42, wherein said fecal sample is a human fecal sample.

Claim 47. (New) The method of Claim 46, wherein said treatment includes removal of contamination from said fecal sample to obtain an uncontaminated feces-derived bacteria sample.

Claim 48. (New) The method of Claim 42, wherein said bacteria are isolated by colonies formation on selective culture mediums.

Claim 49. (New) The method of Claim 42, wherein said relative fraction of each of said bacteria types is determined by calculating the percentage of said bacteria type from the total count of bacteria in the same bacteria sample.

Claim 50. (New) The method of Claim 42, wherein said bacteria are Gram-negative anaerobic bacteria.

Claim 51. (New) The method of Claim 50, wherein said Gram-negative anaerobic bacteria is of a genus selected from the group consisting of *Escherichia*, *Salmonella*, *Shigella*, *Klebsiella*, *Yersinisa*, *Enterobacter*, *Hemophilus*, *Gardnerella* and *Pasteurella*.

Claim 52. (New) The method of Claim 51, wherein said bacteria is *E.coli*.

Claim 53. (New) The method of Claim 52, wherein said *E.coli* is isolated from said fecal sample by culturing the feces-derived sample of bacteria on a culture medium selective for *E.coli*.

Claim 54. (New) The method of Claim 53, wherein the culture medium is selected from the group consisting of MacConkey agar and m-Endo agar.

Claim 55. (New) The method of Claim 49, wherein said bacteria are Gram-positive bacteria.

Claim 56. (New) The method of Claim 55, wherein said Gram-positive bacteria is of a genus selected from the group consisting of *Staphylococcus*, *Enterococcus*, *Streptococcus*, *Lactococcus*.

Claim 57. (New) The method of Claim 56, wherein said bacteria is *Streptococcus bovis* and/or *Enterococcussp.*

Claim 58. (New) The method of Claim 57, wherein Enterococci coliform is isolated from said fecal sample by culturing the feces-derived sample of bacteria on a culture medium selective for Enterococcus.

Claim 59. (New) The method of Claim 58, wherein said culture medium is selected from the group consisting of Slanetz-Bartley agar and Bile-esculine-azide agar.

Claim 60. (New) The method of Claim 42, wherein said cancer cells are a standard culture of cancer cells.

Claim 61. (New) The method of Claim 60, wherein said standard culture of cancer cells has the accession No. ATCC HTB-22 (MCF7).

Claim 62. (New) The method of Claim 42, wherein said mixture is interacted with the cancer cells for a time period sufficient to determine the extent of interaction between the bacteria and the cancer cells.

Claim 63. (New) The method of Claim 62, wherein the number of interacted and/or non-interacted cancer cells present at the end of said time period is determined, based on which a tumor cell necrosis index (TCNI) is calculated.